

## **STIC Biotechnology Systems Branch**

### **RAW SEQUENCE LISTING** **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/589,594  
Source: IFWP  
Date Processed by STIC: 8/28/06

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FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER** **VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

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Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
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Revised 01/10/06



IFWP

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/589,594

DATE: 08/28/2006  
TIME: 10:43:27

Input Set : A:\082368-008900US.txt  
Output Set: N:\CRF4\08282006\J589594.raw

4 <110> APPLICANT: Nakamura, Yusuke  
5 Furukawa, Yoichi  
7 <120> TITLE OF INVENTION: METHOD FOR DIAGNOSING COLORECTAL CANCERS  
10 <130> FILE REFERENCE: 082368-008900US  
12 <140> CURRENT APPLICATION NUMBER: US/10/589,594  
12 <141> CURRENT FILING DATE: 2006-08-15  
12 <150> PRIOR APPLICATION NUMBER: PCT/JP2004/002145  
13 <151> PRIOR FILING DATE: 2004-02-24  
15 <160> NUMBER OF SEQ ID NOS: 23  
17 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
19 <210> SEQ ID NO: 1  
20 <211> LENGTH: 2624  
21 <212> TYPE: DNA  
22 <213> ORGANISM: Homo sapiens  
24 <220> FEATURE:  
25 <221> NAME/KEY: CDS  
26 <222> LOCATION: (294)...(1688)  
28 <400> SEQUENCE: 1  
29 ggcacgaggg gccgacgcga gcgcgcgcgt tcgcttcagc tgctagctgg cccaagggag 60  
30 gcgaccgcgg aggggtggcga ggggcggcca ggaccgcag ccccggggcc gggccggtcc 120  
31 ggaccgccag ggagggcagg tcagtgggca gatcgctcc gcgggattca atctctgccc 180  
32 gctctgataa cagtcctttt ccctggcgct cacttcgtgc ctggcaccgc gctgggcgcc 240  
33 tcaagaccgt tgtctcttcg atcgcttctt tggacttggc gaccatttca gag atg 296  
34 Met  
35 1  
37 tct tcc aga agt acc aaa gat tta att aaa agt aag tgg gga tcc aag 344  
38 Ser Ser Arg Ser Thr Lys Asp Leu Ile Lys Ser Lys Trp Gly Ser Lys  
39 5 10 15  
41 cct agt aac tcc aaa tcc gaa act aca tta gaa aaa tta aag gga gaa 392  
42 Pro Ser Asn Ser Lys Ser Glu Thr Thr Leu Glu Lys Leu Lys Gly Glu  
43 20 25 30  
45 att gca cac tta aag aca tca gtg gat gaa atc aca agt ggg aaa gga 440  
46 Ile Ala His Leu Lys Thr Ser Val Asp Glu Ile Thr Ser Gly Lys Gly  
47 35 40 45  
49 aag ctg act gat aaa gag aga cac aga ctt ttg gag aaa att cga gtc 488  
50 Lys Leu Thr Asp Lys Glu Arg His Arg Leu Leu Glu Lys Ile Arg Val  
51 50 55 60 65  
53 ctt gag gct gag aag gag aag aat gct tat caa ctc aca gag aag gac 536  
54 Leu Glu Ala Glu Lys Glu Lys Asn Ala Tyr Gln Leu Thr Glu Lys Asp  
55 70 75 80  
57 aaa gaa ata cag cga ctg aga gac caa ctg aag gcc aga tat agt act 584  
58 Lys Glu Ile Gln Arg Leu Arg Asp Gln Leu Lys Ala Arg Tyr Ser Thr  
59 85 90 95

*see p. 8*  
**Does Not Comply  
Corrected Diskette Needed**

## RAW SEQUENCE LISTING

DATE: 08/28/2006

PATENT APPLICATION: US/10/589,594

TIME: 10:43:27

Input Set : A:\082368-008900US.txt

Output Set: N:\CRF4\08282006\J589594.raw

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61 acc gca ttg ctt gaa cag ctg gaa gag aca acg aga gaa gga gaa agg 632
62 Thr Ala Leu Leu Glu Gln Leu Glu Glu Thr Thr Arg Glu Gly Glu Arg
63 100 105 110
65 agg gag cag gtg ttg aaa gcc tta tct gaa gag aaa gac gta ttg aaa 680
66 Arg Glu Gln Val Leu Lys Ala Leu Ser Glu Glu Lys Asp Val Leu Lys
67 115 120 125
69 caa cag ttg tct gct gca acc tca cga att gct gaa ctt gaa agc aaa 728
70 Gln Gln Leu Ser Ala Ala Thr Ser Arg Ile Ala Glu Leu Glu Ser Lys
71 130 135 140 145
73 acc aat aca ctc cgt tta tca cag act gtg gct cca aac tgc ttc aac 776
74 Thr Asn Thr Leu Arg Leu Ser Gln Thr Val Ala Pro Asn Cys Phe Asn
75 150 155 160
77 tca tca ata aat aat att cat gaa atg gaa ata cag ctg aaa gat gct 824
78 Ser Ser Ile Asn Asn Ile His Glu Met Glu Ile Gln Leu Lys Asp Ala
79 165 170 175
81 ctg gag aaa aat cag cag tgg ctc gtg tat gat cag cag cgg gaa gtc 872
82 Leu Glu Lys Asn Gln Gln Trp Leu Val Tyr Asp Gln Gln Arg Glu Val
83 180 185 190
85 tat gta aaa gga ctt tta gca aag atc ttt gag ttg gaa aag aaa acg 920
86 Tyr Val Lys Gly Leu Leu Ala Lys Ile Phe Glu Leu Glu Lys Lys Thr
87 195 200 205
89 gaa aca gct gct cat tca ctc cca cag cag aca aaa aag cct gaa tca 968
90 Glu Thr Ala Ala His Ser Leu Pro Gln Gln Thr Lys Lys Pro Glu Ser
91 210 215 220 225
93 gaa ggt tat ctt caa gaa gag aag cag aaa tgt tac aac gat ctc ttg 1016
94 Glu Gly Tyr Leu Gln Glu Glu Lys Gln Lys Cys Tyr Asn Asp Leu Leu
95 230 235 240
97 gca agt gca aaa aaa gat ctt gag gtt gaa cga caa acc ata act cag 1064
98 Ala Ser Ala Lys Lys Asp Leu Glu Val Glu Arg Gln Thr Ile Thr Gln
99 245 250 255
101 ctg agt ttt gaa ctg agt gaa ttt cga aga aaa tat gaa gaa acc caa 1112
102 Leu Ser Phe Glu Leu Ser Glu Phe Arg Arg Lys Tyr Glu Glu Thr Gln
103 260 265 270
105 aaa gaa gtt cac aat tta aat cag ctg ttg tat tca caa aga agg gca 1160
106 Lys Glu Val His Asn Leu Asn Gln Leu Leu Tyr Ser Gln Arg Arg Ala
107 275 280 285
109 gat gtg caa cat ctg gaa gat gat agg cat aaa aca gag aag ata caa 1208
110 Asp Val Gln His Leu Glu Asp Asp Arg His Lys Thr Glu Lys Ile Gln
111 290 295 300 305
113 aaa ctc agg gaa gag aat gat att gct agg gga aaa ctt gaa gaa gag 1256
114 Lys Leu Arg Glu Glu Asn Asp Ile Ala Arg Gly Lys Leu Glu Glu Glu
115 310 315 320
117 aag aag aga tcc gaa gag ctc tta tct cag gtc cag ttt ctt tac aca 1304
118 Lys Lys Arg Ser Glu Glu Leu Leu Ser Gln Val Gln Phe Leu Tyr Thr
119 325 330 335
121 tct ctg cta aag cag caa gaa gaa caa aca agg gta gct ctg ttg gaa 1352
122 Ser Leu Leu Lys Gln Gln Glu Glu Gln Thr Arg Val Ala Leu Leu Glu
123 340 345 350
125 caa cag atg cag gca tgt act tta gac ttt gaa aat gaa aaa ctc gac 1400

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/589,594

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Input Set : A:\082368-0089000US.txt

Output Set: N:\CRF4\08282006\J589594.raw

```

126 Gln Gln Met Gln Ala Cys Thr Leu Asp Phe Glu Asn Glu Lys Leu Asp
127      355      360      365
129 cgt caa cat gtg cag cat caa ttg cat gta att ctt aag gag ctc cga 1448
130 Arg Gln His Val Gln His Gln Leu His Val Ile Leu Lys Glu Leu Arg
131 370      375      380      385
133 aaa gca aga aat caa ata aca cag ttg gaa tcc ttg aaa cag ctt cat 1496
134 Lys Ala Arg Asn Gln Ile Thr Gln Leu Glu Ser Leu Lys Gln Leu His
135      390      395      400
137 gag ttt gcc atc aca gag cca tta gtc act ttc caa gga gag act gaa 1544
138 Glu Phe Ala Ile Thr Glu Pro Leu Val Thr Phe Gln Gly Glu Thr Glu
139      405      410      415
141 aac aga gaa aaa gtt gcc gcc tca cca aaa agt ccc act gct gca ctc 1592
142 Asn Arg Glu Lys Val Ala Ala Ser Pro Lys Ser Pro Thr Ala Ala Leu
143      420      425      430
145 aat gaa agc ctg gtg gaa tgt ccc aag tgc aat ata cag tat cca gcc 1640
146 Asn Glu Ser Leu Val Glu Cys Pro Lys Cys Asn Ile Gln Tyr Pro Ala
147      435      440      445
149 act gag cat cgc gat ctg ctt gtc cat gtg gaa tac tgt tca aag tag 1688
150 Thr Glu His Arg Asp Leu Leu Val His Val Glu Tyr Cys Ser Lys *
151 450      455      460
153 caaaataagt atttgttttg atattaaaag attcaatact gtattttctg ttagcttggtg 1748
154 ggcattttga attatatatt tcacattttg cataaaactg cctatctacc tttgacactc 1808
155 cagcatgcta gtgaatcatg tatcttttag gctgctgtgc atttctcttg gcagtgatac 1868
156 ctccctgaca tggttcatca tcaggttgca atgacagaat gtggtgagca gcgtctactg 1928
157 agactactaa cattttgcac tgtcaaaaata cttggtgagg aaaagatagc tcaggttatt 1988
158 gctaattgggt taatgcacca gcaagcaaaa tattttatgt tttgggggtt tgaaaaatca 2048
159 aagataatta accaaggatc ttaactgtgt tgcattttt tatccaagca cttagaaaac 2108
160 ctacaatcct aattttgatg tccattgtta agaggtggtg atagatacta tttttttttt 2168
161 catattgtat agcgggttatt agaaaagttg gggattttct tgatctttat tgctgcttac 2228
162 cattgaaact taaccagct gtgttccccca actctgttct gcgcacgaaa cagtatctgt 2288
163 ttgaggcata atcttaagtg gccacacaca atgttttctc ttatgttatc tggcagtaac 2348
164 tgtaacttga attacattag cacattctgc ttagctaaaa ttgttaaaat aaactttaat 2408
165 aaaccatgt agccctctca tttgattgac agtatttttag ttatttttg cattcttaaa 2468
166 gctgggcaat gtaatgatca gatctttggt tgtctgaaca ggtattttta tacatgcttt 2528
167 ttgtaaacca aaaactttta aattttctta ggttttctaa catgcttacc actgggctac 2588
168 tgtaaatgag aaaagaataa aattatttaa tgtttt 2624
170 <210> SEQ ID NO: 2
171 <211> LENGTH: 464
172 <212> TYPE: PRT
173 <213> ORGANISM: Homo sapiens
175 <400> SEQUENCE: 2
176 Met-Ser Ser Arg Ser Thr Lys Asp Leu Ile Lys Ser Lys Trp Gly Ser
177 1      5      10      15
178 Lys Pro Ser Asn Ser Lys Ser Glu Thr Thr Leu Glu Lys Leu Lys Gly
179      20      25      30
180 Glu Ile Ala His Leu Lys Thr Ser Val Asp Glu Ile Thr Ser Gly Lys
181      35      40      45
182 Gly Lys Leu Thr Asp Lys Glu Arg His Arg Leu Leu Glu Lys Ile Arg
183      50      55      60

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/589,594

DATE: 08/28/2006

TIME: 10:43:27

Input Set : A:\082368-0089000US.txt

Output Set: N:\CRF4\08282006\J589594.raw

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184 Val Leu Glu Ala Glu Lys Glu Lys Asn Ala Tyr Gln Leu Thr Glu Lys
185 65 70 75 80
186 Asp Lys Glu Ile Gln Arg Leu Arg Asp Gln Leu Lys Ala Arg Tyr Ser
187 85 90 95
188 Thr Thr Ala Leu Leu Glu Gln Leu Glu Glu Thr Thr Arg Glu Gly Glu
189 100 105 110
190 Arg Arg Glu Gln Val Leu Lys Ala Leu Ser Glu Glu Lys Asp Val Leu
191 115 120 125
192 Lys Gln Gln Leu Ser Ala Ala Thr Ser Arg Ile Ala Glu Leu Glu Ser
193 130 135 140
194 Lys Thr Asn Thr Leu Arg Leu Ser Gln Thr Val Ala Pro Asn Cys Phe
195 145 150 155 160
196 Asn Ser Ser Ile Asn Asn Ile His Glu Met Glu Ile Gln Leu Lys Asp
197 165 170 175
198 Ala Leu Glu Lys Asn Gln Gln Trp Leu Val Tyr Asp Gln Gln Arg Glu
199 180 185 190
200 Val Tyr Val Lys Gly Leu Leu Ala Lys Ile Phe Glu Leu Lys Lys
201 195 200 205
202 Thr Glu Thr Ala Ala His Ser Leu Pro Gln Gln Thr Lys Lys Pro Glu
203 210 215 220
204 Ser Glu Gly Tyr Leu Gln Glu Glu Lys Gln Lys Cys Tyr Asn Asp Leu
205 225 230 235 240
206 Leu Ala Ser Ala Lys Lys Asp Leu Glu Val Glu Arg Gln Thr Ile Thr
207 245 250 255
208 Gln Leu Ser Phe Glu Leu Ser Glu Phe Arg Arg Lys Tyr Glu Glu Thr
209 260 265 270
210 Gln Lys Glu Val His Asn Leu Asn Gln Leu Leu Tyr Ser Gln Arg Arg
211 275 280 285
212 Ala Asp Val Gln His Leu Glu Asp Asp Arg His Lys Thr Glu Lys Ile
213 290 295 300
214 Gln Lys Leu Arg Glu Glu Asn Asp Ile Ala Arg Gly Lys Leu Glu Glu
215 305 310 315 320
216 Glu Lys Lys Arg Ser Glu Glu Leu Leu Ser Gln Val Gln Phe Leu Tyr
217 325 330 335
218 Thr Ser Leu Leu Lys Gln Gln Glu Glu Gln Thr Arg Val Ala Leu Leu
219 340 345 350
220 Glu Gln Gln Met Gln Ala Cys Thr Leu Asp Phe Glu Asn Glu Lys Leu
221 355 360 365
222 Asp Arg Gln His Val Gln His Gln Leu His Val Ile Leu Lys Glu Leu
223 370 375 380
224 Arg Lys Ala Arg Asn Gln Ile Thr Gln Leu Glu Ser Leu Lys Gln Leu
225 385 390 395 400
226 His Glu Phe Ala Ile Thr Glu Pro Leu Val Thr Phe Gln Gly Glu Thr
227 405 410 415
228 Glu Asn Arg Glu Lys Val Ala Ala Ser Pro Lys Ser Pro Thr Ala Ala
229 420 425 430
230 Leu Asn Glu Ser Leu Val Glu Cys Pro Lys Cys Asn Ile Gln Tyr Pro
231 435 440 445
232 Ala Thr Glu His Arg Asp Leu Leu Val His Val Glu Tyr Cys Ser Lys

```

## RAW SEQUENCE LISTING

DATE: 08/28/2006

PATENT APPLICATION: US/10/589,594

TIME: 10:43:27

Input Set : A:\082368-0089000US.txt

Output Set: N:\CRF4\08282006\J589594.raw

```

233      450      455      460
236 <210> SEQ ID NO: 3
237 <211> LENGTH: 22
238 <212> TYPE: DNA
239 <213> ORGANISM: Artificial Sequence
241 <220> FEATURE:
242 <223> OTHER INFORMATION: An artificially synthesized primer sequence for
243      RT-PCR
245 <400> SEQUENCE: 3
246 acaacagcct caagatcatc ag 22
248 <210> SEQ ID NO: 4
249 <211> LENGTH: 20
250 <212> TYPE: DNA
251 <213> ORGANISM: Artificial Sequence
253 <220> FEATURE:
254 <223> OTHER INFORMATION: An artificially synthesized primer sequence for
255      RT-PCR
257 <400> SEQUENCE: 4
258 ggtccaccac tgacacgttg 20
260 <210> SEQ ID NO: 5
261 <211> LENGTH: 23
262 <212> TYPE: DNA
263 <213> ORGANISM: Artificial Sequence
265 <220> FEATURE:
266 <223> OTHER INFORMATION: An artificially synthesized primer sequence for
267      RT-PCR
269 <400> SEQUENCE: 5
270 agagatccga agagctctta.tct 23
272 <210> SEQ ID NO: 6
273 <211> LENGTH: 21
274 <212> TYPE: DNA
275 <213> ORGANISM: Artificial Sequence
277 <220> FEATURE:
278 <223> OTHER INFORMATION: An artificially synthesized primer sequence for
279      RT-PCR
281 <400> SEQUENCE: 6
282 gatgctcagt ggctggatac t 21
284 <210> SEQ ID NO: 7
285 <211> LENGTH: 24
286 <212> TYPE: DNA
287 <213> ORGANISM: Artificial Sequence
289 <220> FEATURE:
290 <223> OTHER INFORMATION: An artificially synthesized primer sequence for
291      RT-PCR
293 <400> SEQUENCE: 7
294 cgaaagcttc agagatgtct tcca 24
296 <210> SEQ ID NO: 8
297 <211> LENGTH: 27
298 <212> TYPE: DNA

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/589,594

DATE: 08/28/2006  
TIME: 10:43:28

Input Set : A:\082368-008900US.txt  
Output Set: N:\CRF4\08282006\J589594.raw

lease Note:

se of n and/or Xaa have been detected in the Sequence Listing. Please review the  
equence Listing to ensure that a corresponding explanation is presented in the <220>  
o <223> fields of each sequence which presents at least one n or Xaa.

eq#:23; N Pos. 489,490,491,492

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/589,594

DATE: 08/28/2006

TIME: 10:43:28

Input Set : A:\082368-008900US.txt

Output Set: N:\CRF4\08282006\J589594.raw

:12 M:270 C: Current Application Number differs, Replaced Current Application No  
:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
:485 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
:489 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:23  
:498 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:480



10/589,594

8

<210> 23  
<211> 5089  
<212> DNA  
<213> Artificial Sequence

<220>

<223> An artificially synthesized vector sequence

<221> misc feature

<222> (489)...(492)

<223> n = GAP

<400> 23

"n" can only represent a single nucleotide, nothing  
else